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K-D® TOOLS

The Hustlers for Your Toolbox

LANCASTER, PA., U.S.A. • • • HAMILTON, ONT., CANADA

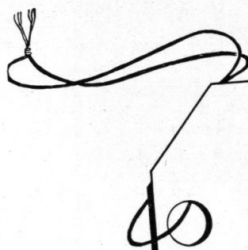
INTRODUCTION

The practice of removing manifolds in the natural course of servicing valves is gaining favor with more mechanics year after year. Due to rapidly changing body design and lower hung motors this practice makes for economy in the long run. For 28 years K-D has specialized in valve servicing equipment (valve spring lifters in particular) and even after this long experience has not been able, because of limitations placed by automotive designers, to produce a Valve Spring Lifter which is universally applicable. Much of the difficulty encountered in servicing valves in the modern motor can be overcome if the manifolds are removed, and, if this practice is followed, there are few if any motors that cannot be serviced with a K-D Valve Lifter or Compressor.



K-D[®] TOOLS

"The Hustlers for Your Toolbox"



We do not authorize the free replacement of K-D Tools from Jobbers' Stock. Broken or so-called "defective" tools may be returned pre-paid to factory for repair if possible, or replacement at our option. Repair charges, if any, and return transportation will be invoiced to be paid by the owner.

VALVE SERVICE TOOLS FOR THE GENERAL SHOP

K-D No. 380 VALVE SPRING COMPRESSOR

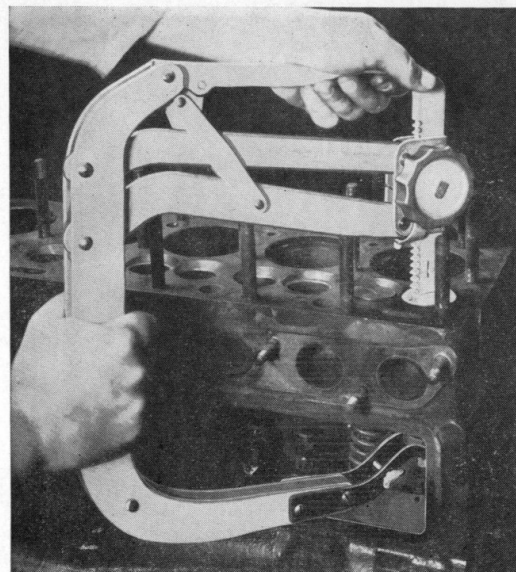
for
L- and Valve-in-head motors.

A strong, fast-operating Compressor that services nearly all motors on the road today, both L-head and Valve-in-head. Ideal for the general shop. *Will not service Lincoln V, Cadillac or LaSalle motors. (See 337 Cadillac Compressor Set, page 6.)*

With throat opening of 10" x 10 $\frac{1}{4}$ " the K-D 380 will handle most all cars and many truck and small tractor motors. Adjustable jaws and adjustable plunger (see Operation below) make it just about the most universal Compressor on the market today. It is safe and fast for one man operation.

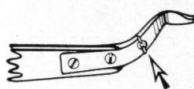
Rigid bar-steel construction, strongly braced and riveted. Overall size 14 $\frac{3}{4}$ " high x 12 $\frac{1}{4}$ " wide. Worn or damaged parts replaceable. (See page 16.)

Two sets of jaws furnished—No. 32 Offset and

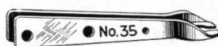


This shop photograph shows the K-D 380 in action. Mechanics like its fast, one man operation.

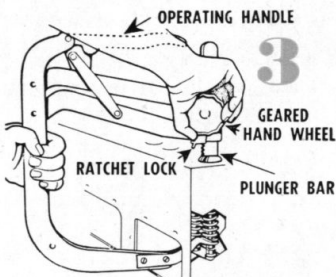
No. 35 Straight. Additional jaws also available (See No. 38 below). All jaws are tempered-in-oil for dependable service. Compressor packed in individual corrugated carton, net wt. 8 lbs.



No. 32
Offset Jaws



No. 35
Straight Jaws



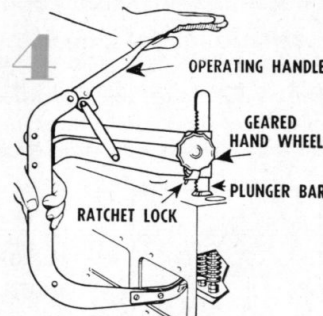
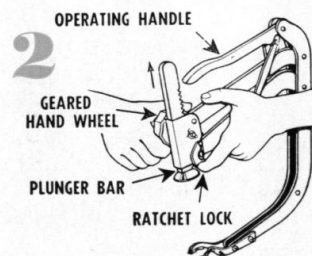
OPERATION

First—adjust the jaws to fit the valve spring by turning the wing screw. Jaws or arm may be sprung in compressing the spring if this is not done carefully.

Second—hold the compressor as shown 2, release the Ratchet Lock and turn the Hand Wheel until the Plunger Bar is raised as high as it will go.

Third—Place the Compressor on motor with the Operating Handle down and raise the first spring by turning the Hand Wheel. When the spring is raised the Ratchet Lock will be engaged and the depth adjustment will automatically be set for all the rest of the springs. After the keepers are out and you are ready to proceed to the next spring, raise the Operating Handle to remove the Compressor—do not disturb the Hand Wheel setting.

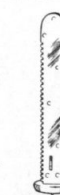
Fourth—after the first spring, place the Compressor in position shown 4, with Operating Handle up. Push Handle down to raise spring. (In some few motors, where space is restricted and it is impossible to use the Handle, all springs can of course be raised by using the Hand Wheel.)



No. 38 Extra High Offset Jaws, are not furnished as regular equipment, but are available for use on the 380 Compressor on motors with low manifolds.

No. 380W Adaptor Set for White Motors. For use with 380 Compressor. Includes pair of No. 38 jaws altered to prevent striking block, plus special Plunger Bar to seat on both flat and "cup shaped" valves in White Motors. Plunger Bar easily installed.

No. 381W Compressor for White Motors only. The 380 Compressor, adapted for White Motors only.



380W Set
Plunger Bar

New

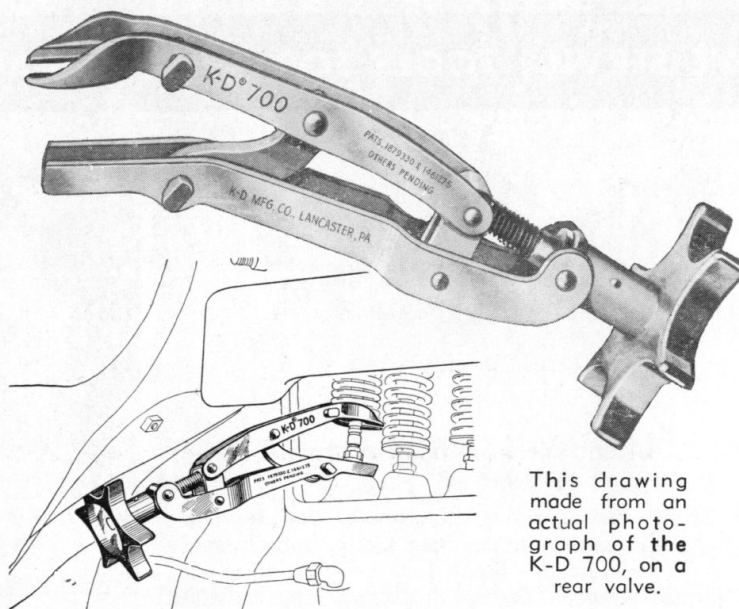
K-D No. 700 VALVE SPRING LIFTER

for
servicing deep-set
"hard-to-get-at" motors.

A dependable lifter of deep offset design, especially adaptable to under-fender, and under-manifold applications.

Compact, (only 8" long) the K-D 700 provides plenty of easy lift. Allows ample working space and clear view of all valves. Designed with special attention toward allowing easy replacement of valve locks.

Comfortable, easy turning handwheel actuates a



This drawing made from an actual photograph of the K-D 700, on a rear valve.

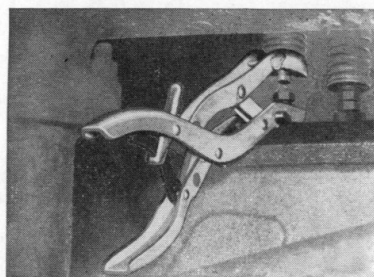
screw which raises and lowers upper jaws, providing **automatic locking** in any position. Jaws are adjustable by means of thumb screws, and are correctly tempered for long service life. Net weight 1 lb.

OPERATION

Adjust jaws to fit spring and tappet by means of thumb screws. By turning handwheel counterclockwise, jaws are brought together so the lifter may be positioned. Place cup shaped upper jaws under spring, lower jaws on tappet block. Turn handwheel in a clockwise direction, raising spring to desired height. Lifter locks automatically at any height, allows free use of both hands after spring is raised.

K-D No. 900 "Hi-Offset" VALVE SPRING LIFTER

for
fast under-fender operation
on late model L-head motors.



Shop photograph of K-D 900 Lifter in place on late model motor, manifolds in place. Note plenty of working space and good, clear view of valve.

Only 8 $\frac{3}{4}$ " long, the 900 allows plenty of working space and clear view of valve. Just right for late models Chrysler, DeSoto, Dodge, Plym-

outh, Oldsmobile, Packard, Hudson, Terraplane, Studebaker, Dodge truck, etc., **with manifolds on!** (Parts, page 16.) Net wt. 1 lb.

OPERATION

Auxiliary jaws swing into position (illustration at left) for motors having unusual tappet-to-spring clearance such as Chrysler C-7, DeSoto S-1, Dodge truck, and others. Provides total parallel lift of 3".

Oil-tempered, adjustable jaws, hardened safety ratchet lock, thumb release.

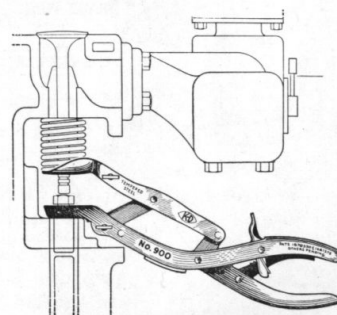
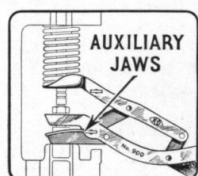


Diagram of photo above. Plenty of lift, good view, ample clearance.

K-D No. 600 VALVE SPRING LIFTER

for
practically all L-head
motors, old and new.

A strong dependable lifter for general shop use. 10" long, its adjustable oil-tempered jaws are parallel in action.

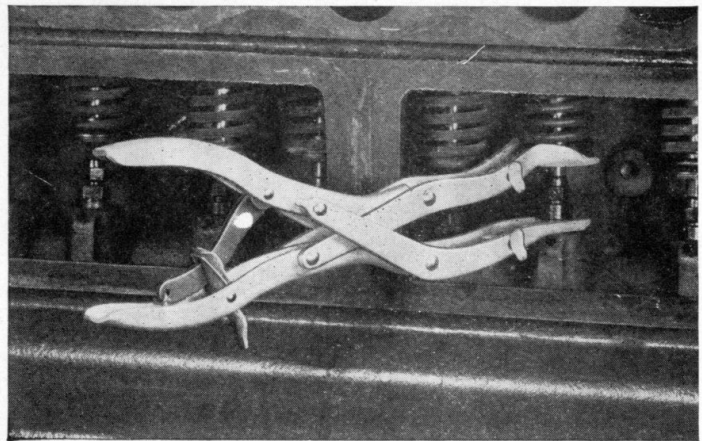
Improved ratchet lock release on lower handle for convenience on newer motors. Just the right tool for Auburn, Graham, Hudson, Hupmobile, Lafayette, LaSalle (straight 8), Nash, Oldsmobile, Packard, Pontiac, Studebaker, Willys, and Jeep. Also adaptable to many Industrial and Marine motors. Net wt., 15 oz. (Parts, page 16.)

OPERATION

Adjust jaws to width by turning thumb screws. Release ratchet, and place lifter in position with cup shaped jaws under the spring. Compress handles, rais-



ing spring to height desired. Automatic ratchet lock holds lifter in place, allows free use of both hands. To release, kick ratchet lock forward, allowing spring to descend.

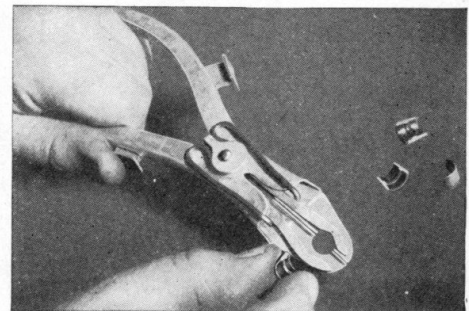


Photograph of the K-D 600 Lifter taken right in the shop while in use on a late model motor. This old favorite has pleased thousands of users with its versatility.

K-D No. 605 VALVE KEEPER INSERTER

for
handling nearly all
types of split keepers.
Ideal for use with all
K-D Valve Lifters.

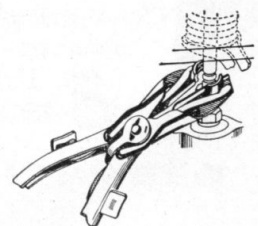
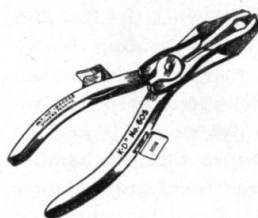
An easy loading, fast operating Keeper Inserter that handles nearly all types of split keepers, large or small. Made of light weight sheet steel, it is light and easy to handle, and **supports itself** on the valve stem; both hands are free to work the lifter. Has sturdy, correctly tempered springs. Ideal for use with all K-D Valve Lifters. 7" long, net wt., 4 oz.



Loading the K-D 605 Inserter. Pressure on thumb pad opens jaw to receive keeper.

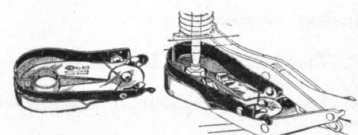
OPERATION

The simplicity of loading is illustrated in the photo above. Pressure on thumb pad opens jaw and strong spring holds keeper when pressure is removed. At the right, the self supporting 605 being placed on the valve stem, keepers in correct position.



K-D No. 610 VALVE KEEPER RECEIVER

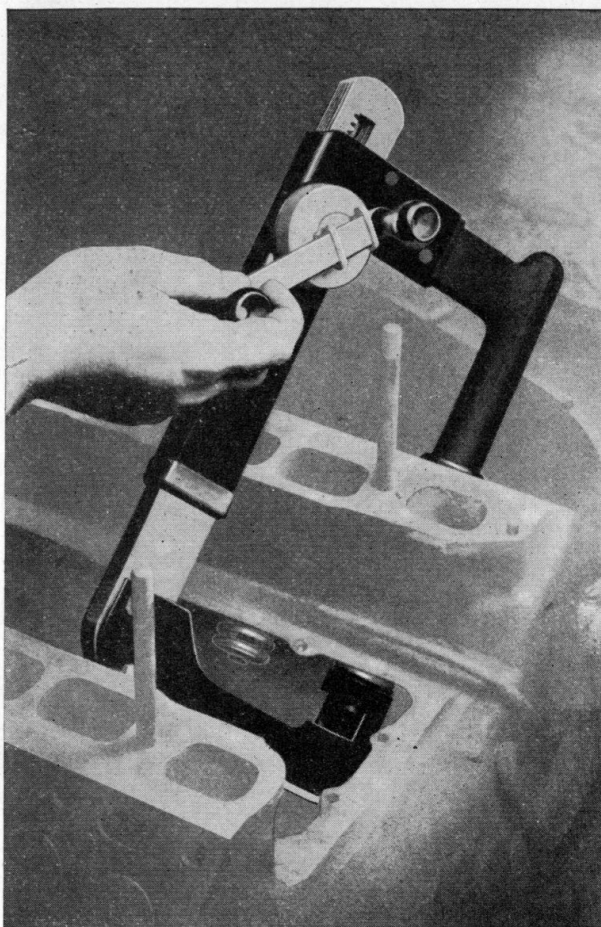
Fits around tappet between jaws of lifter and prevents keepers falling into crankcase when spring is raised. **Extra safety feature**—high guard walls telescope when handles are compressed, open again when 610 is around tappet. Ideal for use with K-D 600. 4" long, net wt., 2 oz.



K-D No. 337 CADILLAC COMPRESSOR SET

for
All Cadillac and
LaSalle V-8 Motors
starting with 1935

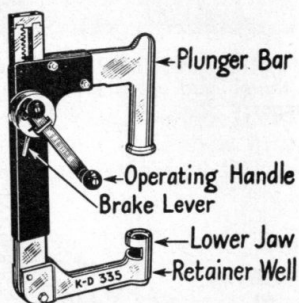
The set comprises the No. 335 Valve Spring Compressor and the No. 336 Valve Keeper Inserter. With the Set one mechanic can remove and replace all valves without walking from side to side for each valve. All left bank valves are removed while standing on the right side and vice versa. It is sturdily constructed of heavy stampings and cast steel and will last a lifetime in normal use. Unique brake provides instant, positive locking at height desired. Set packed in sturdy carton. Net wt., 8 lbs., 9 oz.



This shop photograph shows the No. 335 Compressor raising a valve in a Cadillac V-8 Motor.

OPERATION

1. Remove all valve lifter assemblies.



No. 335 COMPRESSOR



2. Place Compressor on valve with *Plunger Bar* on valve head (centering pin automatically centers it on valve head) and *Lower Jaw* under valve spring washer.
3. Turn *Operating Handle* clockwise to raise spring.
4. Lock the *Operating Handle* by pushing the

Brake Lever towards jaws when spring is at desired height.

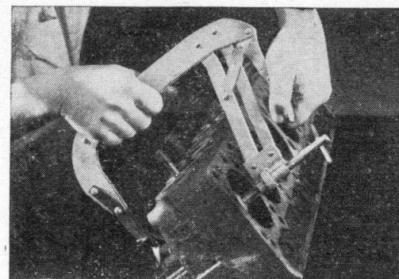
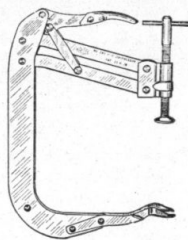
5. Remove valve retainers, allowing them to fall into the *Retainer Well* provided in lower jaw.
6. To remove retainers from well, swing hinged cover to either side catching retainers with other hand as they fall through.

To Replace Retainers . . . Place Retainers one in each spring-tensioned holding jaw on the *No. 336 Inserter*. (Thumb pads actuate holding jaws.) Open jaws of Inserter and enter through opening provided in Lower Jaw of Compressor so that retainers are in position on valve stem. It may be convenient to place Inserter so that its handles are one on each side of Compressor frame. Lower valve spring.

Operation of Brake—Brake is *locked* when lever is forward toward jaws. Always *unlock* brake to remove from valve or when operating preparatory to use. Brake may be in *locked* position if desired before raising a spring and will hold automatically when spring is raised.

K-D No. 385 VALVE SPRING COMPRESSOR

for
small valve-in-head or
L-head motors.
Also small British motors.



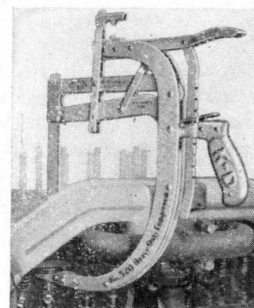
Raising a spring on a late Buick motor with the K-D 385 Compressor.

Serves Chevrolet "Master" and "Standard," also small **British motors**. It is well adapted to many motors if manifolds are removed. Heavy bar steel, with oil-tempered, adjustable jaws. Plunger adjustable by screw for different lengths springs. Safety over-center lock permits free use of both hands when spring is raised. Inside clearance $4\frac{3}{4}"$ x $6\frac{1}{4}"$. Net wt., 2 lbs., 12 oz.

K-D No. 320 VALVE SPRING COMPRESSOR

for
many large truck and bus
motors—also some
tractor motors.

With inside clearance $11" \times 14"$, the 320 is big enough, sturdy enough to service many truck and bus motors, also some tractor motors. Automatic ratchet lock engages in 8 positions, allows free use of both hands when spring is raised. Spring compressing attachment for all sizes of springs. Heavy bar steel, rigidly reinforced. One pair No. 35 Straight Jaws and one pair No. 32 Offset Jaws furnished. No. 38 Extra High Offset Jaws (right) can be used but are not furnished. Net wt. 10 lbs., 6 oz. Worn or damaged parts replaceable. See page 16.



No. 38 **EXTRA** High Offset Jaws for motors with low manifolds. Extra, see page 3.

*Will NOT Service Cadillac, LaSalle or Lincoln V Motors.
To Service Cadillac, see K-D 337 Set, page 6.*

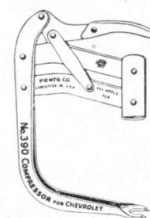
K-D No. 390 VALVE SPRING COMPRESSOR

for
Chevrolet 4 and "Standard" 6

Will not service "Master" (see 385, above). Heavy gage steel. Automatic over center lock. Inside clearance $5" \times 6"$. Net wt., 1 lb., 6 oz.

No. 395 COMPRESSOR, similar to 390, but of slightly different size, to fit British Ford 8 H.P. and Morris Minor Motors. Net wt., 1 lb., 6 oz.

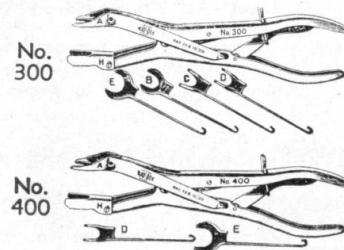
No. 397 COMPRESSOR, similar to 390, but of slightly different size, to fit British Austin 7 H.P. motor. Net wt., 1 lb., 7 oz.



K-D Nos. 300-400 VALVE SPRING LIFTERS

for servicing L-head motors

The original K-D Lifter which is still very popular. $11"$ long, with safety ratchet lock and interchangeable jaws. No. 300 has 6 jaws, as shown and weighs 1 lb., 11 oz. net. No. 400 has four jaws, weight 1 lb., 6 oz. net. When ordering extra jaws, please use correct letters as indicated.



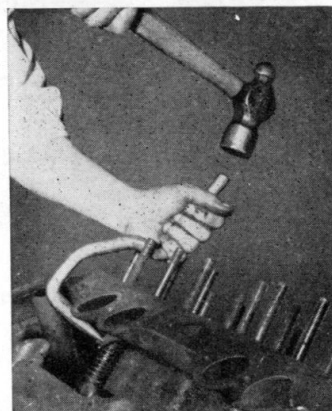
VALVE SERVICE TOOLS FOR FORD MOTORS

K-D No. 920 VALVE GUIDE PULLER SET

for
removing guides on all
Ford-built motors
except 60 H.P.

Set consists of one 917
Valve Retainer Driver,
one 918 Valve Guide Pul-
ler, one set of 16, No. 922
Valve Guide Retainers,
plus latest edition of K-D
Valve Service Manual.

Steel jaw plate on Puller
is replaceable.



Removing retainers by hooking
917 Driver in retainer hole,
driving.

Serves Ford V-85, Mercury, Lincoln-Zephyr, Ford 4 cylinder, Ford 6 cylinder (see adaptor below), and Tractor. (For Ford V-8-60 H.P., see 860 Set, next page.)

This set applies the only correct mechanical principle to the difficult job of removing "Frozen" guides from Ford-built motors, 1934 and later. Gets right over the point of resistance and pulls straight up . . . removing assemblies without damage or delay, no matter how tightly they are stuck! Correctly designed and strongly made of drop-forged and tool steel. Quick and easy to operate—often pays for itself on first job. Valve Service Manual showing procedure, tolerances, clearances furnished FREE with each set. 920 Set net wt., 7 lb., 6 oz.; 917 Driver 1 lb., 6 oz.; 918 Puller 6 lb.



When 918 Puller handle is turned—assemblies are
pulled straight up, out, no matter how tightly stuck.

OPERATION

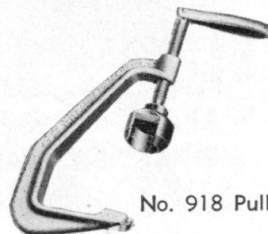


No. 917 Driver

Place 917 Driver with hook end engaged in retainer hole (see photo top of page). Allow spring retainer (lower one) to remain in place. Strike handle of Driver squarely and firmly, but not too hard. Continue driving until retainer is removed. The retainer rests in a counterbore in block, and must be "forged" out slowly. If guides are stuck tight, damage to guides may result if first few hammer blows are too hard. (There is a vent hole through LINCOLN-ZEPHYR retainers, and to

avoid tearing, these retainers must be handled with even more care than those in other Ford motors.) While this method will probably damage retainers, the time saved will more than pay the small cost of new retainers. (See No. 921, 922, page 9.)

After retainers are removed, place Puller in position shown in lower photo—the hardened steel jaw plate between spring coils under guides, the pressure cup on block casting around valve head. When screw handle is turned, jaw plate bears on bottom of guides and assembly is pulled straight up and out, no matter how tight. Cup has sufficient internal clearance to allow valve head to rise inside as assembly comes up. Set works fast, easy—usually removes ALL valves in less than 30 minutes. Hardened Steel Jaw Plate can be replaced if damaged or broken. Shipped with rivets, easy to install. See price list.



No. 918 Puller



No. 923

ADAPTOR FOR 920 SET TO SERVICE FORD 6 CYL.

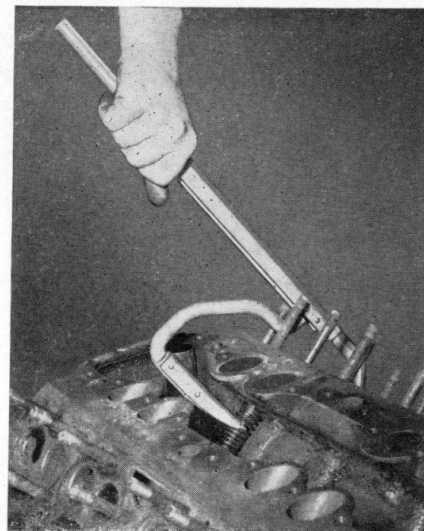
In Ford 6 cyl. motors the intake valves are larger than the exhaust and will not rise inside the cup of the 918 Puller. The No. 923 Adaptor is made for these valves and must be used on the Puller to service Ford 6 cyl. motors. Adaptor is not included with the 920 Set. Must be ordered separately. Net weight 5 oz.

K-D No. 925 VALVE ASSEMBLY REPLACING TOOL

for
replacing valve assemblies
on all Ford-built motors—
except V-8-60 H.P.

The K-D 925, designed for Lincoln-Zephyr, will also replace assemblies in Mercury and Ford V-8-85, Ford 4, Ford 6, and Tractor . . . but not Ford V-8-60. (See K-D 245 Lifter, page 10.) Primarily for use where there is no "heel" to rest a bar lifter. It is a strong dependable tool of channel and tool steel construction. **Positively must not be used in an attempt to remove "frozen" guides!** 21" overall length, net wt. 31 lbs.

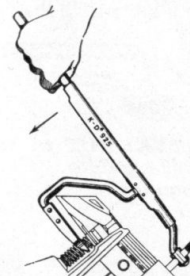
Not for removing!
Guarantee voided if
used in attempt to
remove "Frozen"
guides. See 920
Set, page 8 for this
purpose.



K-D 925 hooks on head stud, downward pressure on handle does it!

OPERATION

The link on the end of the tool is hooked on one of the head studs as shown in the photo above and drawing at right. The jaw is inserted between coils of the spring and engaged on guide flange. Downward pressure on the handle pulls assembly down, permitting installation of guide retainer. The handle of the 925 is short enough to service Ford 4 and 6 cylinder motors conveniently and also has rod extension (shown in use) for extra leverage on stiff springs.



K-D No. 922 Replacement Valve Guide Retainer

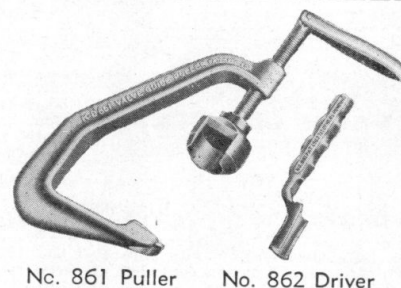
In removing retainers with 917 Valve Guide Driver, they are "forged out" and bent beyond salvaging. The time saved in this operation more than pays the small cost of new retainers. No. 922 Retainer fits Ford V-8-85, Mercury, Ford 4 and 6 cyl., Ford Tractor. No. 921 fits Lincoln Zephyr.



K-D No. 860 VALVE GUIDE PULLER SET

for removing guides from Ford
V-8-60 H.P. motors only.

This Set is the same in mechanical principles as the 920 on page 8, but smaller to fit the 60 H.P. Ford V-8. Consists of one 861 Valve Guide Puller, one 862 Valve Guide Driver, and latest edition K-D Valve Service Manual. 860 Set, net wt., 4 lbs., 14 oz.; 861 Puller, 4 lbs., 3 oz.; 862 Driver, 11 oz.



No. 861 Puller

No. 862 Driver

OPERATION

Fig. 1 shows valve and spring being raised with 260 Valve Lifter (see page 10) without removing the lower valve spring retainer . . . and insertion of Driver. Fig. 2 shows Driver in position, self-supported under valve head with guides driven

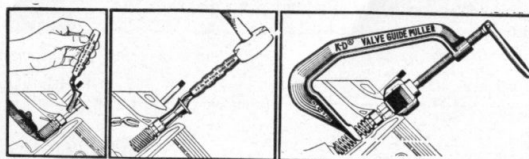


Fig. 1

Fig. 2

Fig. 3

down far enough to remove guide retainer. With K-D 260 Bar Lifter (page 10) raise valve and spring without removing lower spring retainer. Insert Driver under valve head. Again raise valve with Lifter, Insert Driver (Fig. 1). Fig. 2 shows Driver in position, self supported under valve head. Strike handle with hammer, driving guide down far enough to remove retainer. Fig. 3 shows Puller in position to pull assembly . . . hardened steel jaw between coils of spring under guides . . . pressure cup resting on block casting around valve head. Turn down screw handle . . . assembly is pulled straight up—no damage or delay. Pressure cup has sufficient internal clearance to allow valve head to rise inside as assembly is pulled. Hardened steel Jaw plate replaceable if damaged or broken. Shipped with rivets. Easy to install. See price list.

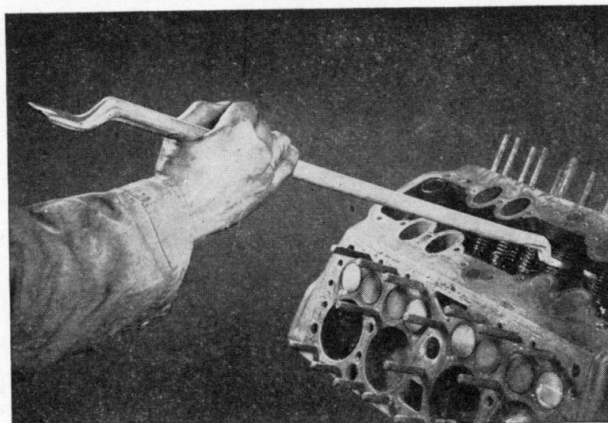
K-D No. 245 BAR-TYPE VALVE SPRING LIFTER

for
replacing assemblies
on Ford V-8 and
Mercury motors.

An ideal companion tool to 920 Set for replacing retainers. *Not for removing!* Forged from chrome vanadium steel, correctly designed, properly tempered. 30" long with identical jaws at each end. Valve Service Manual furnished. Net wt. 3 lbs., 8 oz.



NOTE: *NOT to be used for prying out "frozen" valve guides. Guarantee voided if used in this manner.*



A shop photo showing the 245 in place on a Ford V-8 motor. Raising handle pulls guide down for installing retainer.

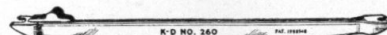
OPERATION

Replace serviced assembly in guide bore with the split between the guides running crosswise in motor, so that each half of the guides is gripped by the jaw of the bar lifter. Insert the jaw of the 245 between the coils of the valve spring, engaging the shoulder cast on the bottom of the guides. Raising up on the handle of the lifter pulls the guide down . . . permitting installation of the valve guide retainer. It's fast and easy.

K-D No. 260 BAR-TYPE VALVE SPRING LIFTER

for
Ford V-8-60

Strong channel steel, hardened, but **not to be used on "Frozen" guides.** Especially recommended for use with K-D 860 Set (see Operation of 860 Set, page 9), but not in place of it. Net wt., 1 lb., 1 oz.



K-D VACUUM CUP VALVE GRINDERS

for
hand grinding valves

For hand grinding valves in Ford-built motors —A, B, 4 cyl., V-8 and V-12. Coil spring keeps metal retaining ring in position over valve head and prevents cup from slipping off center while grinding. Flange keeps hands from sliding down handle. Replaceable synthetic rubber cups, impervious to gasoline, oil, atmospheric conditions.

No. 503, Cup diameter 1 1/8". Net wt., 4 oz.

No. 865, Cup diameter 1 1/8" (Ford V-8-60). Net wt., 3 oz.



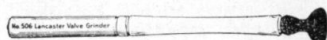
No. 505, Dual Grinder with cups 1 1/8" and 1 1/4" can be used on many valve sizes. Synthetic rubber suction cups, but no metal retaining ring like 503 above. Cups replaceable. Net wt., 3 oz.

No. 505BF Grinder, like 505 but with 1 1/8" and 1 1/4" dia. cups for all types small motors—industrial, etc.



No. 506 Grinder is a popular low-priced tool for Ford-built and many other valves. Synthetic rubber suction cup, 1 1/8" dia. Cup replaceable. Net wt., 2 oz.

No. 506 BF Grinder like 506, but with 1 1/8" diameter cup. For British Ford and many small American motors.



No. 504

No. 504 Adaptor for use with mechanical grinder on Ford and other unslotted valves. Synthetic rubber suction cup and metal retaining ring to keep cup from slipping off center while grinding. Cup diameter 1 1/8". Net wt., 2 oz. No. 507, plain synthetic rubber cup adaptor for use with mechanical grinders. 1 1/8" dia., wt., 1/2 oz. No. 509 same with 1 1/4" diameter. Wt., 1/2 oz.



No. 507
No. 509



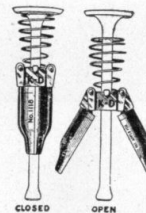
Rubber Cups only. May be ordered in the following diameters: 1 1/8", 1 1/4", 1 1/2", 1 3/4".

When ordering replacement cups for any of the K-D Vacuum Valve Grinders, be sure to specify cup diameter required.

K-D VALVE GRINDING BUSHINGS

for
taking place of guides
when grinding valves.

Accurately machined, hinged, one piece bushings, sizes for *all* Ford-built motors. Valve installed as shown in cut. Used when grinding valves, also in place of guides when establishing stem-to-tappet clearance. Jumper spring attached.



No. 1118, Body diameter 1.029", for Ford V-85, Mercury, Lincoln-Zephyr, Tractor, Ford 4 cyl. and Ford 6 cyl. Net wt., 4 oz.

No. 1160, Body diameter .8505", for Ford V-80 only. Net wt., 3 oz.

No. 511, Body diameter .591", for Ford A and B. Net wt., 3 oz.

No. 1260, Body diameter .8105", for British Ford 8 H.P. Net wt., 3 oz.

K-D VALVE GUIDE DRIVERS

for
driving out "frozen"
valve guides.

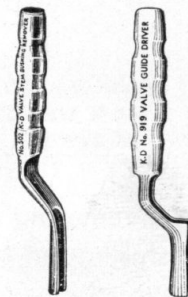
Well made, drop-forged tools, correctly designed to drive "frozen" Ford Valve Guides.

No. 502 Driver is for Ford Models A and B and is long enough to drive guides completely out of the bores. Net wt., 11 oz.

No. 818 Driver is for Ford V-8-85, 1932 and 1933 models and is long enough to drive guides completely out of the bores. Net wt., 10 oz.

No. 862 Driver is for Ford V-8-60 only and is designed to drive guides down only far enough to permit the removal of the guide retainer. It will not drive guides completely out of the bores. Net wt., 11 oz.

No. 919 Driver is for Ford V-8-85 (early models) and Lincoln-Zephyr and drive guides down only far enough to permit the removal of the guide retainers. Net wt., 11 oz.



No. 502 No. 862
No. 818 No. 919

No. 919 cannot be used on late motors because the new type heavy valve springs will not allow valves to rise high enough to allow insertion. Use No. 917, page 8.

K-D No. 250 BAR-TYPE VALVE SPRING LIFTER

for
Ford V-8-85, Mercury.

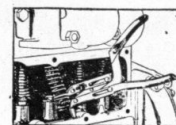
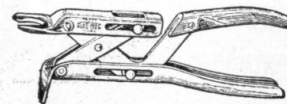
For all models Ford V-8-85 and Mercury since 1932. Not to be used for prying out "Frozen" guides. Large jaw for '32 and '33 models; small jaw with fulcrum for later. Overall 25". Good value at low price. Not subject to return or replacement. Net wt., 1 lb., 6 oz.



K-D No. 307 VALVE SPRING LIFTER

for
"A" and "B" Fords.

The most efficient tool for removing and replacing these valve springs. Parallel jaw action. "Walks" spring right in or out, as shown in illustration. Sturdy. Dependable. Net wt., 12 oz.

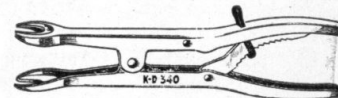


"Walks" springs right in or out, as shown →

K-D No. 340 VALVE SPRING LIFTER

for
L-head motors.

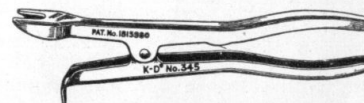
A good value at a low price. Strong and durable. Automatic locking device. Does not possess parallel jaw feature. Net wt., 12 oz.



K-D No. 345 VALVE SPRING LIFTER

for
"A" & "B" Fords only.

Strongly built of channel steel. An exceptional value, but does not have parallel jaw action. Overall length 10". Net wt., 11 oz.



GENERAL TOOLS For Automotive, Industrial, Electrical, Plumbing Uses

K-D PISTON PIN TOOLS

for removing and
installing wrist pins.

Necessary tools for installing and removing wrist pins in Ford motors using center split ring pin lock. Tapered end expands split ring in rod, allowing easy insertion of pin. Tools threaded in center for removal after pin is installed. Alloy steel, hardened and ground to accurate fit.



No. 560 Pin Tool, Ford A and B, net wt., 2 lbs.

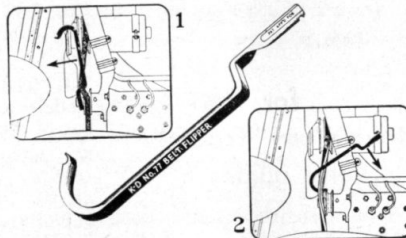
No. 618 Pin Tool, Ford V-8-85, Mercury, Lincoln-Zephyr and all other late model using split ring center lock only. Not for V-8-60. Net wt., 13 oz.

No. 619 Pin Tool, for Studebaker Champion since 1939.

K-D No. 77 FAN BELT FLIPPER

for removing and
installing fan belts.

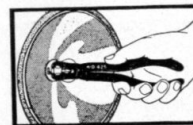
For quick, easy removal and installation of V-type fan belts without the necessity of disturbing pulley settings. An especially good tool for Ford A, Ford B, Ford V-8-85, Mercury, and Lincoln-Zephyr. Straight end removes as shown in Illustration No. 1. Hooked end installs (Illus. 2). Carefully formed and milled from half round steel. Net wt., 7 oz.



K-D No. 425 LAMP BULB PLIERS

for removing and
installing lamp bulbs.

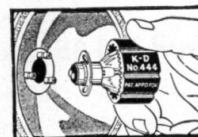
The right tool for removing and installing all types of lamp bulbs. Jaws milled with sharp teeth and templet fitted to exact diameter of bulb base to insure even, non-slip grip on base of bulb and prevent danger of cracking glass. Tempered. 7½" long, offset jaws to prevent scratched reflectors. Net wt., 4 oz.



K-D No. 444 LAMP BULB GLOVE

for removing and
installing lamp bulbs.

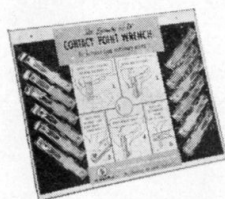
Pliable rubber cup, ribbed inside, grips glass of bulb and makes removal and installation of lamp bulbs safe and easy. Also ideal for use on amplifying tubes. Small size and low price makes 444 a MOTORISTS' ITEM. Packed only in bulk.



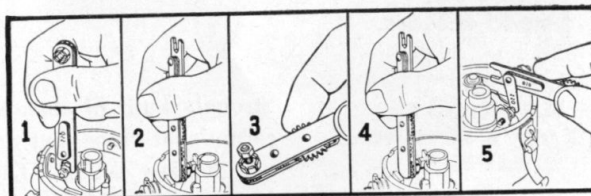
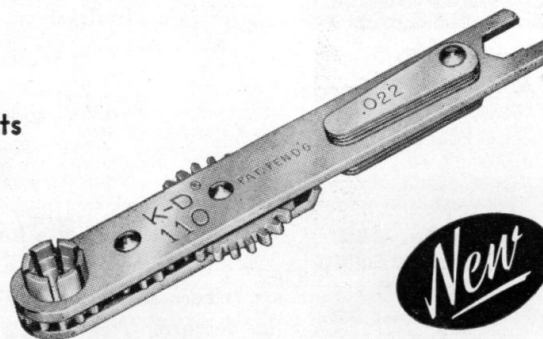
K-D No. 110 CONTACT POINT WRENCH

for
Autolite-type
stationary points

Removes, installs stationary points on Autolite type distributors. Speedy, sure, dependable. End wrench breaks loose lock nut. Socket on opposite end spins point in or out. Gear driven socket stepped down to hold point securely. Permits fast, easy finger tip starting. Includes clearance gauges from .015" to .030" for checking. Heavy gauge steel construction. 3¾" long—always handy. Fast, easy to use . . . see the 5 simple steps below.



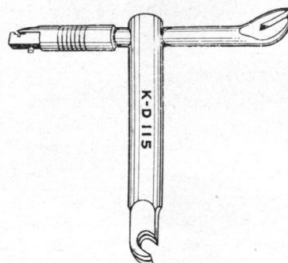
Strong, eye-catching counter display, 11" x 14". Holds 12 tools. Easel back for quick set-up. Chart on back shows all distributors tool services. Net wt., 2 lbs.



1. Break loose lock-nut holding old point. 2. Spin out old point.
3. Socket holds point securely—starts easy. 4. Spin in new point.
5. Measuring clearances from .015 to .040".

K-D No. 115 IGNITION POINT ALIGNING TOOL

for
aligning contact points
right in the distributor.



This universal tool is the result of long and careful study by ignition experts and is carefully forged and machined to handle all kinds of points in **all** types of distributors, **including Ford**. Figs. 1, 2, 3 show each of the three arms of the tool in use on the type point it is made to service.

No. 115 is carefully machined and correctly tempered for complete satisfaction and long service. Net wt., 5 oz.

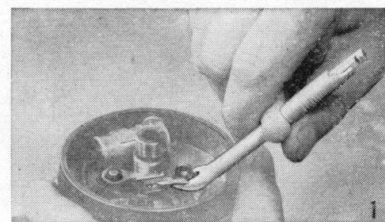
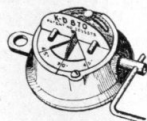


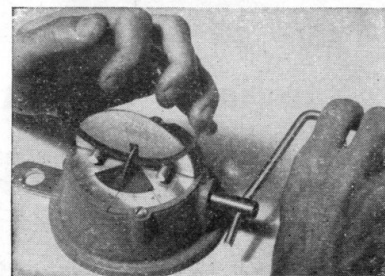
Fig. 1—Aligning channel type arm
Fig. 2—In use on high speed arm
Fig. 3—Aligning stationary point

K-D No. 870 PISTON RING FILER

for
precision sizing of all types
of piston rings.



A portable rotary Filer for sizing any make, any type, and size of piston ring and doing it with machine shop precision. Filer holds to head stud or bolts to work bench. Ring is held against the calibrated gage plate as shown in the illustration. When crank is turned, both ends of the ring are filed at the same time, human error is eliminated and you're sure of a parallel workmanlike job. Six inch continuous cutting stroke. Saw teeth on edges of cutter can be used as rotary hack saw for slotting piston skirts, etc. Cutter milled to maximum sharpness and correctly tempered. Easily replaced. Net wt., 2 lb., 12 oz.



K-D No. 872 CUTTER FILE For use on 870 above. Select tool steel, correctly tempered for long service. Net wt., 1 oz.



K-D No. 875 PISTON RINGER

for
removing, installing piston rings.

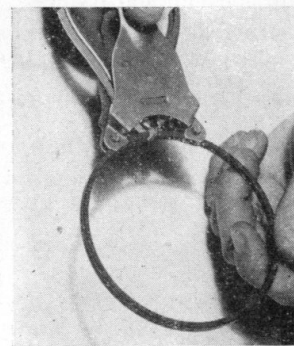
A handy, pocket-size tool which removes and installs all makes, types and sizes of piston rings up to 4" diameter. Light, but strongly built, with correctly tempered springs. Net wt., 3 oz.

OPERATION

To Remove Rings—The Ringer is placed on the ring with the spreaders in the ring opening, as shown above. When the handles are compressed the ring will be ex-



Ready to remove a piston ring

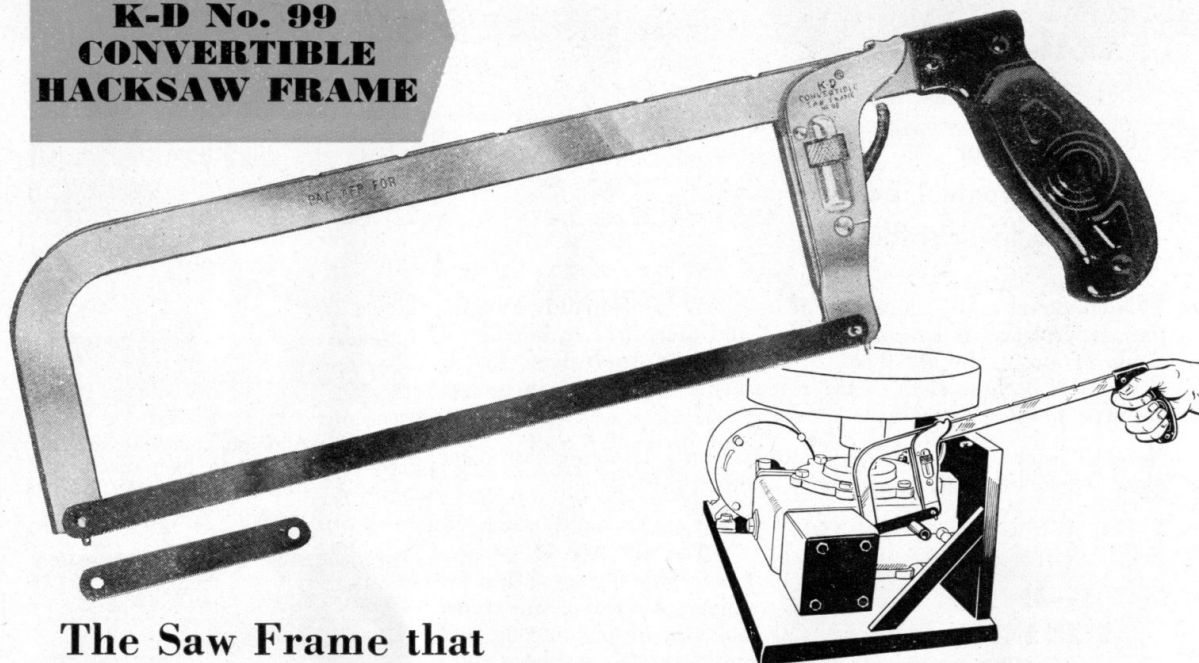


Gripping to install ring

panded and can be removed top or bottom from the piston. Saves rings, fingers.

To Install Rings—The gripping jaws of the Ringer are opened as shown right above and the ring is placed in the jaws, against the pins with the spreaders in the ring opening. When the handles are compressed the ring will be expanded and can be installed. Fast!

**IMPROVED
K-D No. 99
CONVERTIBLE
HACKSAW FRAME**



The Saw Frame that

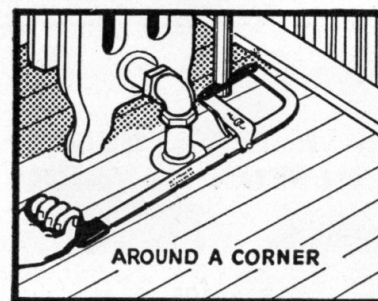
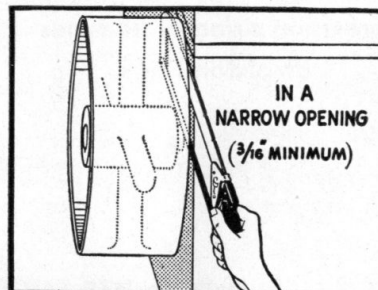
"CUTS AROUND CORNERS"

Spans obstructions and projections on difficult jobs.

An all steel saw frame with a new, quick blade change feature. Stops provided to fit 3", 4½", 6", 8", 10", 12" blades. One 3" and one 12" blade furnished. Blades are quickly changed or repositioned by releasing lever on tension bar, installing blade and resetting lever. Broken blades can be used by annealing and drilling new hole on any of the above centers.

With this frame you can saw in places impossible to reach with conventional frames. With 3" or 4½" blade in frame, obstructions and projections on difficult jobs are easily spanned. The streamlined "backbone" also permits sawing in openings to a minimum of 3/16".

Backbone and handle are integral, providing great strength and rigidity. There are no loose parts and the frame positively cannot "jackknife." Comfortable pistol grip correctly angled for balance. Net wt. 1 lb., 7 oz.

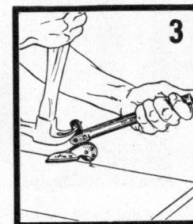
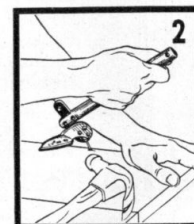
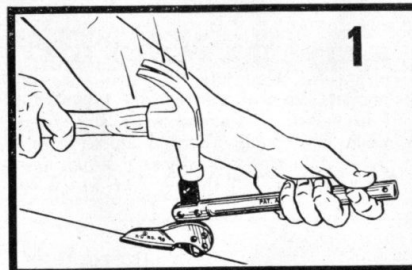
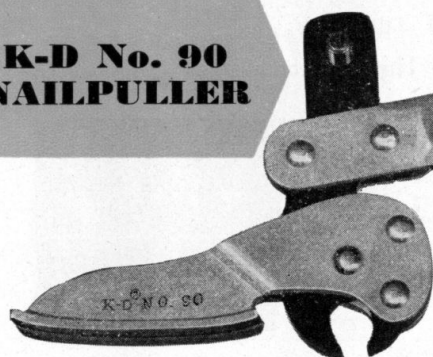


The ideal Frame for Machinists, Plumbers, Electricians, Maintenance Men.

K-D "FLEX-STEEL" HACKSAW BLADES

The finest quality blades, correctly tempered for dependable long life. One dozen to a package. No. 13—3" blades. No. 14—4½" blades. No. 15—12" blades. No. 16—10" blades. No. 17—6" Jr. blades, ¼" wide, .014" thick, 32 teeth to inch for use in Spring Steel Frames.

K-D No. 90 NAILPULLER



A powerful, convenient tool for general use. For Carpenters, Electricians, Floor Layers, Everyone!

A small, extra-leverage hand tool for pulling nails; small enough to carry in your pocket or toolbox! Strong, durable, it will pull up to tenpenny nails easily.

Only 12" long, you use it in tight places where ordinary bar pullers are too large and awkward to manage. The counteracting steel jaws bite into the wood *under* the nail head. Double leverage is provided on tough, rusted nails by engaging hammer on the pin in the upright member, pulling with both hands. (Illus. 3.) Net wt., 11 oz.

Rugged construction with hardened, tool-steel, counteracting jaws. Will last a lifetime of normal use. Rustproof finish. Packed in sales-inviting counter display carton.



This colorful display carton contains six Nail-pullers, individually boxed, plus bright, two-color display board. Card slips into slots in box for quick easy setup. Net wt., 4½ lbs.

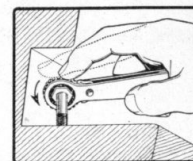
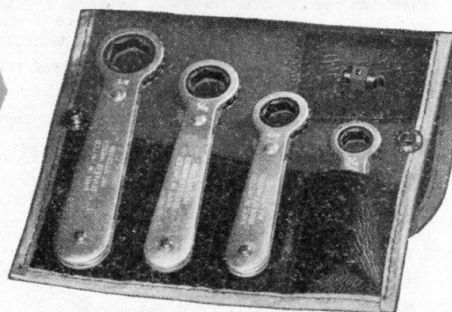
Rest rocker securely on wood surface with puller jaws straddling nail head. Strike top of upright member with hammer until both jaws are driven in wood *under* nail head. Raise handle until jaws grip nail, then pull.

With nail started, only one hand is necessary to pull it all the way. 2. Carry the puller in your pocket for handy use everywhere!

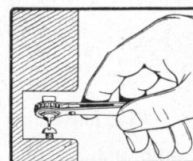
For double leverage, engage claw hammer on pin in upright member 3. —pull with both hands. You remove the stubbornest nails up to tenpenny size.

K-D No. 20 RATCHET WRENCH SET

for
ignition, carburetor, dash, and
all hard-to-get-at places.



A screw being started with finger on ratchet teeth which extend beyond housing for the purpose.



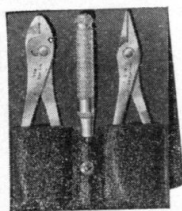
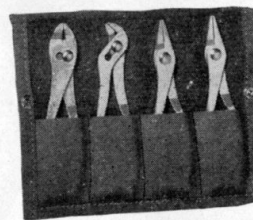
Offset screwdriver bit in one of many applications.

The four most popular hexagonal sizes, $\frac{3}{8}$ ", $\frac{7}{16}$ ", $\frac{1}{2}$ ", and $\frac{5}{8}$ " openings, put up in a pocket size fabric roll. Double end screwdriver bit to fit $\frac{3}{8}$ " wrench included. Each wrench is a complete unit, with no heads to change. Ratchet teeth are close to permit short stroke. Ratchet reversible. Screw or nut held in place for "upside-down" work as in boxsocket. Correctly tempered heads and ratchets. Sizes range from 3" to 4½" long. Net wt. set, 12 oz. No. 21— $\frac{3}{8}$ ", No. 22— $\frac{7}{16}$ ", No. 23— $\frac{1}{2}$ ", No. 24— $\frac{5}{8}$ ", No. 26 Screwdriver Bit. Order individual wrenches by number.

K-D PLIERS & TOOL KITS

The RIGHT Tools
for Small Jobs in Tight Places.

K-D No. 10K PLIERS KIT. Carefully designed, alloy steel pliers for a variety of small jobs in tight places. Packed in handy pocket size roll. 4 distinct types of jaws: **No. 6 Standard** with slip joint; **No. 7 Parrot** with slip joint; **No. 8 Needle**; **No. 9 Flat**. Each $4\frac{1}{4}$ " long. Forged steel, jaws milled, handles knurled, all tempered to correct hardness. When folded for the pocket, roll measures $3" \times 4\frac{3}{4}" \times \frac{1}{2}"$ thick. Net wt., 6 oz.



K-D No. 5B TOOL KIT. No. 6 and No. 8 K-D Pliers packed in handy pocket size roll with 3-in-1 screwdriver. Screwdriver made of brass, knurled handles.

Pocket size, always handy, this set is just right for Mechanics, Electricians, Watchmakers, Dentists, Opticians, Modelmakers, Patternmakers, Hobbyists, etc. Fine for repairing costume jewelry, odd household jobs. An appreciated gift! Net wt., 5 oz.

No. 5C, 3-in-one Screwdriver, knurled brass handle. $4\frac{3}{8}"$ long. Packed 12 to display box. Net wt., 13 oz.

No. 5D, 4-in-one Screwdriver, same construction as 3-in-one, $6\frac{1}{8}"$ long. Packed 12 to display box. Net wt., 2 lbs., 3 oz.

K-D WHEELSTUD RIVET- ING DIE SETS

for
removing and
installing wheel studs.

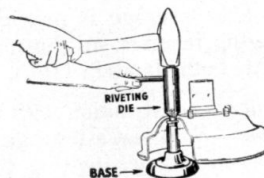
Designed for shops with an average amount of wheel work. Dies and Anvil tempered and Rockwell tested. Complete instructions furnished.

No. S565 Set, for Chevrolet and Pontiac, $\frac{7}{8}"$ Stud. Consists of 565RD Die, Base and Anvil. Net wt., 7 lbs.

No. S567 Set, for Chevrolet truck, $\frac{7}{8}"$ Stud. Consists of 567RD Die, Base and Anvil. Net wt., 6 lbs., 14 oz.

No. S570 Set, for Ford-built cars, $\frac{1}{2}"$ Stud. Consists of 570RD Die, Base and Anvil. Net wt., 9 lbs., 6 oz.

No. S575 Set, for Ford AA and BB Truck, $\frac{3}{4}"$ Stud. Consists of 575RD Die, Base and Anvil. Net wt., 9 lbs., 14 oz.



RIVETING DIES ONLY

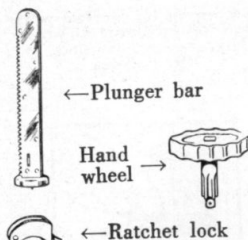
No. 565RD, for $\frac{7}{8}"$ Stud (Net wt., 2 lbs., 5 oz.)
No. 567RD, for $\frac{7}{8}"$ Stud (Net wt., 2 lbs., 4 oz.)
No. 569RD, for $\frac{5}{8}"$ Stud (Net wt., 2 lbs., 4 oz.)
No. 570RD, for $\frac{1}{2}"$ Stud (Net wt., 2 lbs., 5 oz.)
No. 575RD, for $\frac{3}{4}"$ Stud (Net wt., 2 lbs., 2 oz.)



NOTE: When ordering any of this equipment please use the type numbers given at left to avoid confusion.

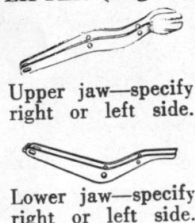
REPLACEMENT PARTS

No. 380 COMPRESSOR (Page 3)



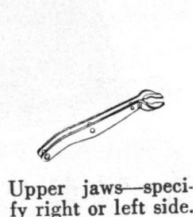
No. 380W Plunger Bar
Adaptor for White Motors
—see Page 3.

No. 600 LIFTER (Page 5)



Ratchet lock.

No. 900 Hi-Offset LIFTER (Page 4)



Upper jaws—specify right or left side.

No. 320 Compressor (Page 7)

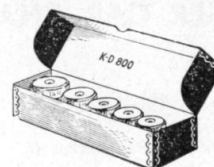


K-D HAMMER-TYPE WHEEL PULLERS

for
quick easy removal of wheel
hubs without damage to
axles.



K-D Short Type
Wheel Puller



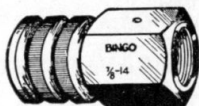
K-D 800 Puller Set

K-D HAMMER TYPE WHEEL PULLERS

These Pullers provide a quick, convenient method for jarring wheel hubs loose without damage to axles. The threads are guaranteed not to strip. Pullers specially heat treated for hard service. Short style only in complete range of thread sizes.

K-D No. 800 Puller Set. The five most popular sizes K-D Short Type Wheel Pullers in sturdy fiber metal edge box. Box free with assortment . . . $\frac{5}{8}$ " x 18, $\frac{3}{4}$ " x 16, $\frac{7}{8}$ " x 14, 1" x 14, and 1 $\frac{1}{4}$ " x 12. Net wt., 2 lbs., 5 oz.

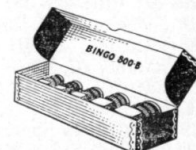
"BINGO" Wheel Pullers



Lower priced line. Same axle sizes as K-D Hammer Type Wheel Pullers. One type only 2 $\frac{1}{4}$ " long, not subject to return for replacement.

No. 800B "BINGO" SET

$\frac{5}{8}$ " x 18, $\frac{3}{4}$ " x 16, $\frac{7}{8}$ " x 14, 1" x 14, 1 $\frac{1}{4}$ " x 12. Bingo Pullers in metal edged fibre box.



K-D HAMMER TYPE AND "BINGO" WHEEL PULLERS

Furnished in following axle sizes only:

Axle Sizes			
$\frac{5}{8}$ " x 18	$\frac{7}{8}$ " x 14	1 $\frac{1}{8}$ " x 7	1 $\frac{1}{2}$ " x 6
$\frac{3}{4}$ " x 16	$\frac{7}{8}$ " x 16	1 $\frac{1}{8}$ " x 12	1 $\frac{1}{2}$ " x 12
$\frac{3}{4}$ " x 20	$\frac{7}{8}$ " x 18	1 $\frac{1}{4}$ " x 7	
1 $\frac{3}{8}$ " x 16	1" x 14	1 $\frac{1}{4}$ " x 12	

AXLE SIZE CHART PASSENGER CAR CHART

AUBURN

'27-'31: 6-66A, 6-66B, 6-76, 6-80, 8-88, 8-90, 8-95, 6-85
'28-'36: 115, 120, 125, 8-98, 8-98A, 8-100, 8-100A, 8-101, 8-101A, 8-105, 12-160, 12-160A, 12-161, 12-161A, 12-165, 6-52, 6-53, 6-54, 8-50, 8-51, 8-52

AUSTIN

'30-'31: All models

AUSTIN (Amer) '30-'32: All models

BUICK

'26-'36: Standard 6-115" W. B., Standard 6-116" W. B., Ser. 40-6 Cyl., 8-60, 8-50, 36-90
'29-'35: Master 6-121" & 129" W. B., Ser. 50 & 60, 6 Cyl., 8-80, 8-90
'36: 36-60, 36-80

CADILLAC

'29-'31: 353, 355, 355A-V8, 370, 370A-V12, 452, 452A-V16; '32-'33: 355B, 355C-V8, 370B, 370C-V12, 452B, 452C-V16; '34-'35: 355D, 355E, 370D, 370E, 452D, 452E; '36: 70, 80; '36-'37: 75, 80, 90; '38-'40: 90, 75 (Except 161" W. B.); '38-'40: 75 (161" W. B.)
'36: Ser. 60; '37: 60, 65, 70; '38-'40: 60, 60S, 61, 65, 72; '41-'42: 60S, 61, 62, 63, 67, 75

CHEVROLET

'15-'23: 490
'24: 490 Superior; '25-'29: K, V, AA, AB-4 Cyl., AC-6 Cyl.; '30-'31: AD, AE-6 Cyl.; '32: BA-Small Taper
'32: BA-Large Taper

CHRYSLER

'26-'28: 4-50, 4-52; '29-'31: CC-6, CJ-6, 6-66; '30-'31: CD-8; '31-'32: CM-6, CI-6; '33: CO-6; '34: CA, CB-6 Cyl.; '35: C6, CZ-Airstream 6 & 8;

Axle Size

$\frac{7}{8}$ " x 14

1" x 14

$\frac{5}{8}$ " x 18

$\frac{5}{8}$ " x 18

1" x 14

1 $\frac{1}{8}$ " x 12

$\frac{3}{4}$ " x 16

1 $\frac{1}{8}$ " x 12

1" x 14

$\frac{5}{8}$ " x 18

$\frac{3}{4}$ " x 16

1 $\frac{1}{8}$ " x 16

CHRYSLER (Con't)

'36: C7, C8-Airstream; '37-'42: C14, C16, C18, C19, C22, C23, C25, C28, C30, C34, C36
'27-'28: 6-60, 6-62, 6-70, 6-72; '27-'29: Imp. 6-80; '28-'29: 6-65, 6-75; '29-'31: 6-70, 6-77; '30-'32: Imp. 8, Imp. Custom 8, CG-8, CH-8, CL-8; '31-'33: DeLuxe 8, CP-8, CQ-Imp.; '33: CT-Royal 8, CQ-Imp. 8; '34-'37: CU, CV, C1, C2, C3, C9, C10, C11, C17-Airflow; '37-'39: C15, C20, C24; '40-'42: C27, C33, C37

CONTINENTAL

'32: 4 & 6 Cyl.
'33-'34: Ace

DE SOTO

'28-'42: All

DEVAUX

'31-'32: 6-75

DODGE

'26-'27: 124-4 Cyl. No. A831147 to A930663, Senior 6, No. 10001 to 1S15045; '27-'28: 128, 129 Fast 4 No. A930664 to A1019544, Stand. 6, Victory 6; '27-'29: Senior 6, No. 1S15045 to 1S29156; '29-'30: DA-6; '29-'30: Senior 6, DB-6 after S50001; '32: DK-8, '33: DO-8
'30-'36: DD-6, DH-6, D-J6 Taxi, DC-8, DG-8, DP-6, Six, DR, DS-6 Cyl., DU-6, D1, D2; '37-'42: D5, D-17, D8, D11, D14, D19, D22

DURANT

'24-'29: 40, 55, 60, 63, 65, 66, 70, M, M2, M4, 75 to No. 2200, 70, 75, 80 after No. 2200
'30-'32: 610, 612, 614, 619, 621, 622

ERSKINE

'27-'29: 50, 51, 52
'30: 53

Axle Size

$\frac{3}{4}$ " x 16

$\frac{7}{8}$ " x 14

$\frac{3}{4}$ " x 16

$\frac{7}{8}$ " x 14

$\frac{3}{4}$ " x 16

$\frac{3}{4}$ " x 16

$\frac{7}{8}$ " x 14

$\frac{3}{4}$ " x 16

$\frac{5}{8}$ " x 18

$\frac{3}{4}$ " x 16

$\frac{3}{4}$ " x 16

$\frac{7}{8}$ " x 14

PASSENGER CAR CHART (CONT'D)

	Axle Size		Axle Size
ESSEX		OLDSMOBILE	
'24-'31: Super 6, Challenger 6, to No. 1250858	5/8" x 18	'15-'19: 44, 45, 8 Cyl.	1 1/8" x 12
'31-'32: 6 Cyl. No. 1250858 to 1266772, 6 Cyl., after No. 1266772, Pacemaker 6	7/8" x 18	'21-'23: 43A, 47, 4 Cyl.	7/8" x 14
FORD		'29-'36: Viking 8, D, E, F, 6 Cyl., F32-6 Cyl., L32-8 Cyl., F34-6 Cyl., F33-6 Cyl., L33 & L34-8 Cyl., F-35, F-36, L-35, L-36	1" x 14
'10-'42: Mod. T-56" Tread, A, B, V8, 18, 40-V8, 48, 50, 67, 68, 73, 74, 77, 78, 81A, 82A, 81C, 82C, 91A, 91C, 99A, 99C, 922A, 922C, O1A, O1C, O9A, O9C, O22A, O22C, 11A, 11C, 19A, 19C, 1NC, All Ford & Mercury '42	5/8" x 18	PACKARD	
FRANKLIN		'23-'32: St. 8, 1-26, 1-33, 2-26, 2-33, 3-26, 3-33, 4-26, 4-33, 5-26, 5-33, 6-26, 6-33, 640, 645, 740, 745, 726, 733, 840, 845, 826, 833, 901, 902, Custom 8, DeLuxe 8, 903, 904	1" x 14
'33-'34: All Models except Olympic 18 & 18B	3/4" x 16	'32-'42: 900, 1001-15" Brake Drums, 1001-14" Brake Drums, 1002, 1100, 1101, 1102, 1003, 1004, 1103, 1104, 1105, 120, 120B, 120C-8 Cyl., 115C-6 Cyl., 1203-4-5, 1403-4-5, 1200-1-2, 1400-1-2, 1500-1-2, 1603-4-5, 1600, 1601, 1700, 1701, 1703, 1801, 1803, 1804, 1806, 1807, 1901, 1903, 1904, 1906, 1907, 1601A, 1602, 1702, 1705, 1801A, 1803A, 1805, 1808, 1901A, 1903A, 1905, 1908, 2003, 2008	7/8" x 14
'33-'34: Olympic 18, 18B	7/8" x 14	'40-'42: 1800, 1900, 1900T, 2000	3/4" x 16
GRAHAM (Graham-Paige)		PEERLESS	
'28-'29: 610; '35-'36: 74, 80, 80A-Crusader; '37; 90A, 95-Standard Ratio, 85-Crusader	7/8" x 14	'27-'32: 6-60, 6-61, 6-81, A-Standard St. 8	7/8" x 14
'28-'29: 614; '28-'30: 619, 621, 629, 827, 835, 837; '33-'35: 65, 67, 68, 8-72, Spec. 6-73	1" x 14	'29-'32: 125 First Series, 125 Second Series, Std. 8, 8-85, 8-95, B-Master St. 8	1" x 14
'29-'30: 612, 46 Std. 6; '30-'31: Prosperity 6, 53, 54, 56	3/4" x 16	PIERCE-ARROW	
'29-'31: 615, 45 Spec. 6, 42 Std. and Spec. 8, 822, 834; '31-'33: Std. 6, Spec. 6, 820; '32-'35: 57, 57A, 58, 64, 69, Sup. 8-75	1 1/8" x 12	'24-'28: 80, 81	7/8" x 14
HUDSON		'28-'29: 81, 133, 144	1" x 14
'21-'29: Mod. O, Super 6	7/8" x 14	PLYMOUTH	
'30-'31: 119" W. B. to No. 921767, 126" W. B. to No. 59692	5/8" x 18	'28-'42: Q, U, 30U, PA, PB, 4 Cyl., PC, PD-6 Cyl., PE DeLuxe 6, PF-6, PJ-6, P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P14	3/4" x 16
'31-'32: 119" W. B., 126" W. B., Pacemaker 8	7/8" x 18	PONTIAC	
'33-'42: Super 6, Std. 8, Major 8, G-6 Cyl., GH, LL, LT-Light 8 and DeLuxe 8, 83, 84, 85, 87, 92, 93, 95, 97, 98, 40C, 41, 43, 44, 47, 10C, 11, 12, 14, 15, 17, 18, 90, 89, 40P, 40T, 10P, 10T, 20C, 21, 22, 24, 25, 27, 20P, 20T	3/4" x 20	'26-'28: All	3/4" x 16
HUPMOBILE		'29-'32: Big 6 & 8	7/8" x 14
'28-'34: A6, A7, Century 6, MI, MM, Century 8, M-8 130" W. B., C-8, CWS-8, 221, S-6, H-8, U-8, 225, 237, L-8, 216, 218, 214, 321, 321A, 421, 421A, 222, 226, 322, 326, 422F, 4261	7/8" x 14	REO	
'34-'35: 427T, 527T	1 1/8" x 12	'24-'35: T6, Flying Cloud, Master, A, C, Wolverine, 2B, Mate, 15, 8-30, Royale 8-31, 8-35, 8-52, S, 2S, 3S, 4S, 6 Cyl.	1" x 14
'34-'36: 417W, 517, 421J, 521J, 518D, 618G, 621N	1" x 14	'30-'32: 6-20, 6-21, Flying Cloud 6-25, 8-21, 8-25	7/8" x 14
KAISER-FRAZER		ROCKNE	
'47-'48	1" x 14	'32-'33: 6-75, 6-65, 10	7/8" x 14
LAFAYETTE		STAR	
'34: To ser. 15922	1" x 14	'22-'30: C-one-piece housing, F, M, R, 4 & 6 Cyl.	5/8" x 18
'35-'38: After 15922	7/8" x 14	STUDEBAKER	
LA SALLE		'19-'30: Big 6, Spec. 6, Pres. 6, Com. 6 No. 4000000 to 40705000, Pres. 8; '34: Mod. C-Pres. 8; '35-'37: 1B-Commander, 1C-President, Mod. 2C, 3C, Pres. 8; '38-'42: 7A, 8A, 9A, 4C, 5C, Pres. 6C, Com. 10A, Champion 1G, 2G, 3G, 4G	1" x 14
'27-'33: 303, 328, 340, 345, 345A, 345B, 345C	1 1/8" x 12	'19-'37: 4 Cyl., Light 6, Std. 6, Dictator 6, Commander 6, Commander 8, 8-70, Dictator 6, Dictator 8, 8-61, 6-53, 6-54, 6-55, 6-56, Dictator 8-62, Commander 8-73, Commander 8-71, Pres. 8-82, Pres. 8-91, 8-92, Mod. A-Dictator 6, Mod. B-Commander 8, 1A, 2A, 3A, 4A, 5A, 6A-Dictator 6	7/8" x 14
'34: 350; '35-'36: 35-50, 36-50; '37: 50; '39: 50 (156" W. B. only); '38-'40: 38-50, 39-50 (Except 156" W. B.), 40-52 and 40-50	1" x 14	'27-'30: Erskine; '39-'41: Champion 1G, 2G, 3G	3/4" x 16
LINCOLN		TERRAPLANE	
'36-'37: Zephyr	5/8" x 18	'32-'38: Terraplane 6, Terraplane-K6 and KT8, K, KU, G, GU-Terraplane, 61, 62, 70, 71, 72, 80, 81, 82, 88	3/4" x 20
MARMON		WHIPPET	
'27-'31: Little 8, L, 68-First Series, 68-Second Series, 78, Roosevelt 8-70, 69	7/8" x 14	'26-'30: 96, 96A, 93A-6 Cyl., 98, 98A	7/8" x 14
'30-'32: 79, 125	1" x 14	WILLYS	
'31-'32: 140, V16	1 1/8" x 12	'30-'32: 6-98B, 8-80, 6-90, 6-90A, 6-97, 6-98D, 8-80D, 8-88	7/8" x 14
NASH		'33-'36: 4-77	3/4" x 16
'17-'30: 4 & 6 Cyl., Spec., Advanced, Ser. 400, Twin Ign. 6, 430, 440, 460, 480; '30-'32: Twin Ign. 8, 490, 890, 990; '32-'33: 1080, Spec. 8; '32-'33: 1090, 1190 Adv. 8, Ambassador 8, 1180; '34: 1290-Amb. 8; '34-'35: 1220-6, 1280-8, 3520-6, 3580-8 to No. 296609; '35: Lafayette 3510 after No. 15922; '35-'40: 3520, 3580, 3680, 3780, 3880, 3980, and 4080 (Bevel Gear); '36-'39: 3620, 3720, 3820, 3920-Nash, 3610, 3710, 3810, 3910-Lafayette; '39-'40: 3980, and 4080 (Hypoid Gear); '40-'42: 4010, 4020, 4160, 4180, 4260, 4280, 4140, 4240	7/8" x 14	WILLYS-KNIGHT	
'26-'29: Light & Std. 6, 220, 320, 420	3/4" x 16	'22-'31: 20A, 64, 65, 66, 66A, 67, Great 6, 66B	1" x 14
'32-'33: 1060-Light 6, 1070-Std. 8, 1120, 1130, 1170	1" x 14	'26-'33: 70, 70A, Special 6, 56, Standard 6, 70B, 87, 6-95, 66D, 66E, 57	7/8" x 14
OAKLAND			
'16-'31: 34, 34B, 34C, 34D, 6-44 with 31 x 4 Wheels, Sport and 2 Pass. with 32 x 4 Wheels, 6-44 with 32 x 4 Wheels, except Sport and 2 Pass., 6-54, All American 6, 8-19, 8-101	7/8" x 14		

TRUCK CHART

ACME & BUS

'23-'39: 14, 16, 20, 20L, 21, 24, 30	1" x 14
'25-'26: 41	1½" x 12
'28-'29: 14, 16	¾" x 14

ACORN

'25-'30: 20, 30	1¼" x 7
'26-'27: 30	1½" x 12
'27-'30: 30P	1" x 14

ARMLEDER

'24-'30: 21, 30, 30B, 50	1½" x 12
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ATTERBURY

'24-'27: 24R, 30R	1½" x 12
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AVAILABLE

'24-'25: JH, L	1½" x 12
'25-'26: Hustler	1" x 14
'25-'26: L1½	1¼" x 7

BIEDERMAN

'29-'30: 45 Express	1¼" x 7
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BROCKWAY & BUS

'24-'30: S13 to S31, SK8 to SK11	1½" x 12
'25-'32: E3-4-9-15, EB4-6-7-8-9-11-16, EB-Bus, Junior, E3 to E25, EB4 to EB21, JB, JBF, Junior 2-3-4, Junior 5-6-7, JF, 65, 75, 60	1" x 14

CHEVROLET

'26-'29: R, X, LM, LO, LP, LQ-6 Cyl.	1" x 14
'26-'32: Capitol—Commercial, AD, AE Commercial, BB—Small Taper	¾" x 16
'30: LR	1½" x 12
'30-'35: LS, LT, M, N, O—Ser. ABCD, PA, PB, PC, PD, QA, QB, QC, & QD	1¼" x 12
'32: BB—Large Taper	1½" x 16

CLINTON

'27-'29: 2½-3 T.	1½" x 6
'28-'31: 1¼-1½ T.	1" x 14
'26-'28: 2B, 32, 42	1¼" x 7
'24-'28: 45	1½" x 12

CLYDESDALE

'25-'30: 10A, 12, 14, 16	1" x 14
'25-'30: 9	1½" x 12
'29-'30: 30	1¼" x 12

COMMERCE

'27-'28: 8A; '28-'30: S11, 20B, 20Y, 20Z, 25Z	1" x 14
'25-'28: Dist. 7, Super, 11, D11, SD11	1¼" x 7
'24-'27: 14, S14	1½" x 12

CORBITT

'25-'26: 25, 20, 21	1" x 14
'25-'28: Dist. 7, Super, 11, D11, SD11	1¼" x 7
'27-'28: 20, 21	¾" x 14

DART

'27-'28: 45	1½" x 12
'29-'30: 30G	1¼" x 12

DAY-ELDER & BUS

'24-'27: BN, H, 20 Bus	1½" x 12
'24-'27: AN, C	1" x 14
'28-'29: MF	¾" x 14

DEFIANCE

RU, 45, TT, 50C, FL	1" x 14
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DIAMOND T

'24-'28: T, T2	1½" x 12
'28: 302	1¼" x 7
'24-'34: O, O4, O5, 75, 76, 77, 150, 151, 210SF, 211SF	1" x 14

DIVCO

'27-'33: All Models	1¼" x 12
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DODGE & BUS (Dodge-Graham)

'24-'30: G, B, G Boy, EC, IC, JC Bus, BE, BE-133" W. B., IE-140" W. B.	1" x 14
'25-'28: All; '27-'30: D, C, LB & MB Bus, LE, ME, OE, TE	1¼" x 7
'26-'31: Commercial, SD, Panel Delivery, DD, DDX, DE-120" W. B., DE-124" W. B., DA 1	¾" x 14
'29-'42: SE, F10, UF10-109" W. B., HC, HCL, KC, KCX, KCL, KCLX, LC, MC, RC, TC, TD15, VC, VD15, WC, WD15	¾" x 16

DOVER

'29-'30: Commercial	¾" x 18
'31-'32: Commercial	¾" x 18

Axle Size

DUPLEX

'26-'33: GF, GH, GS	1½" x 12
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FAGEOL & BUS

'28-'29: 100	¾" x 14
'30-'33: 101	1¼" x 12

FARGO

'29-'32: Clipper	¾" x 14
'29-'32: Freighter	1" x 14
'29-'32: Packet; '39-'41: FH-1, FXH-1, FJ-1, FXJ-1, FK-1	¾" x 16

FEDERAL & BUS

'24-'26: Federal Knight Express; '27-'29: F6, Scout F, 2F6, 2FW	¾" x 14
'24-'34: S21, S22, S23, S27, T2W, T3W, T6W, T7W, T8, T20, T21, T22	1½" x 12
'28-'30: A6, A6B Bus	1¼" x 7
'29-'30: 3F6, 3FW	1" x 14

FISHER

'25-'28: Fast Freight	1" x 14
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FLEXIBLE BUS

'29-'32: 15 Pass.	1½" x 12
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FORD

'19-'30: TT, AA—Separate Brakes	¾" x 14
'30-'33: AA, BB	1¼" x 12
'28-'38: A, B, 50, 68, 77, 78, 81C, 82C	¾" x 18

FORD OF CANADA

'30-'33: AA, BB	1¼" x 12
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GARFORD

'24-'28: 30 & 30-6	1½" x 12
'29-'30: 20Y & S11	1" x 14

GENERAL MOTORS (G. M. C.) Axle Shafts

'19-'24: K, K16, K20	1½" x 12
'27-'29: T10, T11	¾" x 16
'27-'29: T19, T19 Pontiac Motor	1" x 14
'27-'33: T19, T20, T21, T11, T15, T17	¾" x 14
'27-'33: T40, T50, T30, T42, T44	1½" x 12
'31-'33: T18	1¼" x 12

GOTTFREDSON

'28: B24, B26	¾" x 14
'25-'27: 20B	1" x 14
'25-'27: 30B	1¼" x 7
'25-'28: 41, 46, 51, 56	1½" x 12

GRAHAM BROS.

'24-'30: BB, BC, 1B, BD, 1C, JC, 133", BE, IE 130", JE, 140"	1" x 14
'25-'30: Double Bearing, LB, MB, JD, 16, Bus, TE, OE, LE, ME, YEX, YDX, 150", 165", 2	1¼" x 7

GRAHAM-PAIGE

'30-'31: 44 Commercial	1½" x 12
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GRAMM

'26-'30: 443N, 463N, 263RA Bus, 233N, 263N, 343N, 363N	1¼" x 12
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GRASS-PREM

'26-'28: 40, 41	¾" x 14
'27-'28: 80-6	1¼" x 7
'25: 60-70	1½" x 12

GUILDER

'27-'28: B-6	1" x 14
'25-'26: D, D-6	1¼" x 7

HAHN

'28-'29: SJ6	¾" x 14
'26-'27: B-2	1" x 14
'26-'28: SJ4, SJ6	1¼" x 12
'24: O	1½" x 12

HAL-FUR

'25-'28: G, GS	1½" x 12
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HENDRICKSON

'24-'25: O	1½" x 12
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HENNEY

'26-'27: Ambulance	1½" x 12
'26-'31: Hearse, 20, 24, 70, 74	¾" x 14
'28-'31: 20, 24, 10, 14, Ambulance	1" x 14

HUDSON

'38-'39: 90, 91, 98	¾" x 20
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HUG

'26-'30: 20, 22	1¼" x 7
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TRUCK CHART (CONT'D)

INDIANA & BUS

'25-'30: 40, 115, 625	Axle Size 1½" x 12
'25-'29: 111, 400-Clark Rear, 111A, 111X	1¼" x 7
'25-'32: 11, 11X, 611, 300, 60, 64, 74, 200	1" x 14

INTERNATIONAL & BUS

'24-'27: 33	¾" x 14
'24-'31: LD, Special Del., AW1	1" x 14
'21-'34: S, S24, S26, SF34, SF36, SL34, SL36, 15, 15A, 15B-Bus, 6 Speed Special, AW2, AL3, ALF3, A1, A2, B2-Semi Floating	1¼" x 12
'27-'32: SD34, SD36, SD44, SD46, SF44, SF46, A4, A5	1½" x 12

JEEP

(Willys) Universal Model CJ-2A	1" x 14
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KELLY-SPRINGFIELD

'27: KS20 Spec.	1½" x 12
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KENWORTH & BUS

'26-'28: A, WTW	1" x 14
'28-'29: A6	1½" x 12
'28-'30: 45, 55	1¼" x 7

KING ZEITLER

'27-'28: 22A	¾" x 14
'24-'30: 35, 40	1½" x 12

KISSEL

'24-'28: General, Utility	1½" x 12
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KLEIBER

'24-'30: Heavy Duty	1½" x 12
'27-'29: Speed Truck	¾" x 14
'30-'32: 53	1¼" x 12

KREBS

'24-'28: 44, 45, 46	1½" x 12
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LA FRANCE-REPUBLIC

'29-'30: Cl-Clark Rear, Fleetmaster	1" x 14
'29-'30: Fl, FA1	1¼" x 12

LANGE TRUCK

'24-'29: G	1½" x 12
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LARRABEE & BUS

'27: A3	1¼" x 12
'25-'30: A1, A3, 20	1" x 14

LE MOON

'24-'27: GP2	1½" x 12
'24-'28: GP1½, H15	1" x 14
'28-'29: H10	¾" x 14

LUEDINGHAUS

'27-'28: C	¾" x 14
'27-'28: W	1½" x 12

MACCAR

'23-'24: V1, V2, V3	1½" x 12
'28-'29: 36	1¼" x 12

MACK & BUS

'26-'32: 8AC, AB, AC, AK, AP—Chain Drive	1¼" x 12
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MASTER

'24-'28: 21, 22	1½" x 12
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MENOMINEE

'25-'29: Hurryton	1" x 14
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MORELAND & BUS

'25-'28: BX, EX	1½" x 12
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NEW ENGLAND (Netco)

'26-'27: A	1½" x 12
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NOBLE

'28-'29: 146A	1½" x 12
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PATRIOT

'25-'27: 30, 35	1½" x 12
'28-'29: 20-B-6	¾" x 14

PLYMOUTH

'39-'40: PT81, PT105	¾" x 16
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RAINIER

'25: R-36	1½" x 12
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REHBERGER

'25-'28: A	1½" x 12
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REO & BUS

'25-'32: G Truck, W Bus, FC, FD, FH, FA, FB, FE, FF—with Dual Wheels and using 2-ton axle, FCX, FDX, FHX	1¼" x 12
'27-'29: FA, FB, FE, FF-204 to 636	1½" x 12

REO & BUS (Cont'd)

'27-'35: BA, Speedwagon Junior, DA, DC, DF, 15A Junior, S4P	Axle Size 1" x 14
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REPUBLIC

'27-'30: 50, 80, 88, 76, 51, 52	1¼" x 12
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RUGBY (Durant)

'28-'29: 54, T, Fast Mail	5/8" x 18
'29-'31: 614	¾" x 16
'28-'31: L, X, Fleet Truck, 406, 615, 401	1¼" x 12

RUGGLES

'25-'28: 22, 18	1" x 14
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SANFORD

'27-'28: W6-20	1½" x 12
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SEAGRAVE

'24-'28: BF, BT	1½" x 12
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SELDEN-HAHN

'30-'31: Express	1¼" x 12
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SELDON

Unit 20-58" Track & Pacemaker	1" x 14
'24-'29: 35, 37, 34, 36, 38	1¼" x 7
47 Bus	1½" x 6
30C, 33B	1½" x 12

SERVICE

'29-'30: 20Y, S11	1" x 14
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STAR

'27-'28: Fleet-truck	1¼" x 12
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STERLING & BUS

'24-'27: GB-1	1½" x 12
'25-'27: DW8	1" x 14

STEWART

'26-'30: 16, 16X—above No. 161,005	1" x 14
'26-'28: Buddy 21	1½" x 12
'28-'30: 17, 17X, 24, 24X, 28X, 29X	1¼" x 7
'27-'34: Buddy 21X, 30, 30X, 40XA, 42X-Semi Floating	1¼" x 12

STOUGHTON

'25-'28: C, J	1" x 14
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STUDEBAKER

'28-'29: 52B Erskine	¾" x 16
'27-'31: GN, GI, GP, S1-114" W. B.	¾" x 14
'28-'31: 75 Jr., 76, 77, 88, Ser. F-K-N-P, S20, S30-First Type	1¼" x 12
'25-'40: H, GD, GK, GN, 30, 40-146" W. B., GK, K5, L5	1" x 14

TERRAPLANE

'34-'37: Utility Comm., Sedan Del., Comm. Cab, Cab Pick-Up, 61, 70 Commercial	¾" x 20
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TWIN COACH

'30-'35: 15, 19	1¼" x 12
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UNITED

'25-'30: 16C6, 20C6, 25, 30, 30C6	1" x 14
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U. S.

'26-'30: N	1¼" x 7
'27-'29: 20, 21	1½" x 12

VICTOR

'25-'29:	1" x 14
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WACHUSETTS

'25-'29: J	1½" x 12
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WHITE & BUS

'29-'31: 15B, 57	1" x 14
'33-'34: 212, 612, 612K, 613, 613B, after 173741	1½" x 12

WILLYS

'31-'32: C-113	¾" x 14
'30-'31: C-101	1" x 14

WILLYS-KNIGHT & WHIPPET

'27-'30: T100, T101, 96A, 98A	¾" x 14
'27-'30: 15, 16, 20, 21	1¼" x 12
'29-'31: C101, T103	1" x 14

WITT-WILL

'26-'30: NN, P	1½" x 12
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WORLD

'28-'29: D8	1½" x 6
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YELLOW CAB

'24-'27: T1, T2, T3	¾" x 14
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YELLOW COACH

Mod. X & Y	1¼" x 12
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